

# CIVIL AND ENVIRONMENTAL ENGINEERING

## PNRR - Drought risk modelling

<b>Funded By</b>	MINISTERO DELL'UNIVERSITA' E DELLA RICERCA [P.iva/CF:97429780584] Politecnico di TORINO [P.iva/CF:00518460019]
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<b>Context of the research activity</b>	<p>The PhD activity aims at modelling the propagation of meteorological droughts into hydrological and agricultural systems, identifying critical processes and quantifying the current and future drought risk.</p> <p>PNRR M4C2, Investimento 1.3 - Avviso n. 341 del 15/03/2022 - PE0000005 Multi risk science for resilient communities under a changing climate (RETURN) - CUP E13C22001860001</p>
<b>Objectives</b>	<p>The PhD activity is part of the PNRR "RETURN" project, Spoke 1, which addresses the natural and anthropic risks associated to water, and in particular of WP3, which aims at developing a set of monitoring and modelling tools related to water resources in scarce conditions. The contribution of the PhD activity includes the quantification of drought risk and the development of models and strategies to predict the impacts of droughts and water crises in different sectors and at different time scales.</p>
<b>Skills and competencies for the development of the activity</b>	<p>The competencies required for the project include basic sciences (physics and math) and applied sciences (hydrology and hydraulics). Competencies in data processing, statistics and spatial data management are required. Knowledge of a computing tool (Matlab or R) and proficiency in numerical modelling are preferred skills.</p>